IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : Gerald Hewes, et al. Examiner: Recek, Jason D.

Appl. No. : 10/521,507 | TC/A.U.: 2142

Filed : January 18, 2005 | Confirmation No. 2227

For : Integrated Interactive Mobile CERT

Messaging Marketing System and Method

Customer No. : 08791

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being submitted electronically via EFS Web on the date

Patent

shown below.

/Judith Szepesi/ May 27, 2008

Judith A. Szepesi Date

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37(a)

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Group 2142, dated December 26, 2007, which finally rejected claims 1-34, 40-42, and 45-51 in the above identified application. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

The Director is hereby authorized to charge the amount of \$510.00 to Deposit Account No. 02-2666 to cover the cost of filing this opening brief, as set forth in 37 C.F.R. § 41.20(b)(2). Please charge any additional amounts due or credit any overpayment to Deposit Account No. 02-2666.

10/521,507 Page 1 of 53 6783P095

TABLE OF CONTENTS

l.	Real Party in Interest	4
II.	Related Appeals and Interferences	4
III.	Status of Claims	4
IV.	Status of Amendments	4
V.	Summary of The Claimed Subject Matter	4
VI.	Grounds of Rejection To be Reviewed on Appeal	9
VII.	Argument	.10
A.	Overview of Cited References	.10
В.	Rejection I: Claims 1-8, 12, 14-15, and 17. Appellants' Invention is Patentable)
	Over U.S. Patent No. 6,336,138 to Caswell	13
C.	Rejection II: Claims 18 and 19. Appellants' Invention is Patentable Over U.S.	
	Patent No. 6,205,471 to Gilchrist	.17
D.	Rejection III: Claims 9-10 and 13 Appellants' Invention is Patentable Over	
	Caswell in view of Eggleston	21
E.	Rejection IV: Claims 11, 16, 27-31, 40-41, and 46-51. Appellants' Invention is	
	Patentable Over Caswell in view of Gilchrist	.22
	1. Claim Group 1: Claims 11 and 16	. 22
	2. Claim Group 2: Claim 27	23
	3. Claim Group 3: Claim 28-31, 40-41, and 46-51	26
F.	Rejection V: Claims 32-34, 42, and 45. Appellants' Invention is Patentable Ov	/er
	Caswell in view of Gilchrist and further in view of Eggleston.	. 28
G.	Rejection VI: Claim 20. Appellants' Invention is Patentable Over Gilchrist in vi	ew
	of Alleged Knowledge in the Art	30
Н.	Rejection VII: Claim 21. Appellants' Invention is Patentable Over Gilchrist in	
	view of Tucciarone	31
I.	Rejection VIII: Claims 22-25. Appellants' Invention is Patentable Over Gilchris	st
	in view of Dattatri	32
J.	Rejection IX: Claim 26. Appellants' Invention is Patentable Over Gilchrist in vi	ew
	of Eggleston	33
VIII.	Conclusion	35

6783P095

IX.	Claims Appendix	36
X.	Evidence Appendix	52
XI.	Related Proceedings Appendix	53

I. REAL PARTY IN INTEREST

M-Qube, Inc., Watertown, MA, a wholly owned subsidiary of Verisign, Inc. of Mountain View, CA is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

To the best of the Appellants' knowledge, there are no other appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

III. STATUS OF CLAIMS

Claims 1-34, 40-42, and 45-51 are pending in this application. Claims 35-39 and 43-44 are cancelled. Claims 1-34, 40-42, and 45-51 stand rejected. Claims 1-34, 40-42, and 45-51 are presented for appeal. A copy of the claims as they stand on appeal is set forth in the Claims Appendix.

IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Appellant's invention as claimed in claims 1-34, 40-42, and 45-51 is directed to methods and systems assist organizations in developing, testing, deploying, and analyzing messaging systems in an integrated and scalable fashion (Specification,

10/521,507 Page 4 of 53 6783P095

abstract, paragraph 0036-0052). Furthermore, the claimed methods and systems provide a complete solution to develop push, pull, and two-way messaging applications. The applications make use of data available to the organization either by uploading the data to the system or through real-time integrations (Specification, paragraph 0053).

Independent claim 1, and thus dependent claims 2-17, claim a system for organizations to develop, test, execute and analyze messaging programs defining a message application server that comprises a dialog designer, a dialog server, and a message exchange (Specification, paragraphs 0056-0057; Figures 1 and 3). The dialog designer is configured to provide a user interface to an organization's program designer and marketer, to allow for rapid messaging program creation, to provide the ability to select a type of messaging program, to select a service address for the messaging program, to schedule the messaging program for execution, to upload messaging user data into lists, to create segments, to download messaging program result data, to test the messaging program, to provide reports, including real-time reports, on the messaging program (Specification, paragraphs 0056-0057, 0085, 0099-0101; Figure 4). The dialog server is configured to execute the messaging program by execution of a messaging instructions, to manage substantially simultaneously executed messaging programs, to store messaging user results and message delivery status, to maintain state and session context across message invocations for messaging users within a messaging program (Specification, paragraphs 0102-0105; Figure 5). The message exchange is configured to route messages to and from messaging service providers, to manage service addresses, to perform message billing and to connect-to messaging service providers (Specification, paragraphs 0106-0108; Figure 6). Furthermore,

10/521,507 Page 5 of 53 6783P095

organizations can execute messaging programs interacting with messaging users via the messaging service providers (Specification, paragraphs 0089-0098; Figures 2 and 7-9).

Independent claim 18, and thus dependent claims 19-25, claim a method for organizations to develop, execute and analyze messaging programs (Specification, paragraphs 0056-0057; Figures 1 and 3). The method comprises an organization's program designer designing the messaging program, selecting a segment for push programs, selecting a program service address, and testing the messaging program (Specification, paragraph 0110; Figure 8). The messaging program is then executed where the messaging program is either started manually or automatically at a scheduled date (Specification, paragraph 0111, Figure 9). Users interacting with the messaging program are messaged, and the messaging users responses and other messaging user data is captured and stored in a data database (Specification, Figures 8, 9, and 11). The method further comprises stopping the messaging program either manually or automatically at a scheduled date, and analyzing the messaging program using the data captured and stored during the program execution (Specification, paragraph 0110; Figure 8). Furthermore, organizations can execute messaging programs interacting with messaging users via messaging service providers (Specification, paragraphs 0089-0098; Figures 2 and 7-9).

Independent claim 26 claims a method for organizations to push messages to messaging users that comprises creating a segment and starting a messaging program (Specification, paragraph 0110; Figure 8). A bulksend is executed in a dialog server which retrieves the messaging users messaging device addresses and data defined in

10/521,507 Page 6 of 53 6783P095

the segment, and filtering out the messaging device addresses of users that have opted-out, the filtering out to result in the users that have opted out not receiving the push messages (Specification, paragraph 0110-0111; Figures 8 and 9). A messaging program instruction is executed in the dialog server for each messaging device address originating from the bulksend, and the push message is routed to a message exchange to be sent to the appropriate messaging service provider system, and storing any message status delivery returned to the message exchange (Specification, paragraph 0110-0111; Figures 8 and 9). Furthermore, the messaging users whose messaging device addresses are in the segment receive a push message (Specification, paragraphs 0111-0115; Figures 9 and 10).

Independent claim 27 claims a method for organizations to deploy pull messaging programs that comprises receiving in a message exchange a messaging device originated message from a messaging user messaging device via a messaging service provider system, the messaging device originated message is of any one of a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV (Specification, paragraphs 0058, 0112-0115; Figure 10). The messaging device originated message is forwarded from the message exchange to a dialog server (Specification, paragraphs 0112-0113; Figure 10). The method further comprises looking up the appropriate session context and pull messaging program based on the messaging device address and the program service address (Specification, paragraphs

10/521,507 Page 7 of 53 6783P095

o112-0113; Figure 10). Pull messaging program instructions are executed in the dialog server upon receiving the messaging device originated message and based on the session state and context (Specification, Figures 10 and 11), and the messaging device originated message is routed in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange (Specification, paragraphs 0112-0113; Figure 10). Furthermore, the messaging user who sent a messaging device originated message receives a reply message on his messaging device (Specification, paragraphs 0113; Figure 10).

Independent claim 28, and thus dependent claims 29-34, 40-42, and 45-51, claim a system for developing, analyzing, deploying, and monitoring targeted messaging applications (Specification, paragraphs 0056-0057; Figures 1 and 3). The system comprises a client system comprising one or more messaging devices (Specification paragraphs 0079-0080; Figures 1-3 and 7), a message service provider system (Specification, paragraphs 0089-0098; Figures 2-3), and a message application server in communication with the client system and the message service provider system (Specification Figures 1-3). Furthermore, the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging applications, the messaging applications to generate messages, receive messages from and send messages to the message service provider system (Specification, paragraphs 0056-0057; Figures 1 and 3). The message application server is configured to determine and route the messages to the message service provider system regardless of the message service provider system's

10/521,507 Page 8 of 53 6783P095

implemented messaging technology (Specification, paragraphs 0089-0098; Figures 2-3).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-8, 12, 14-15, and 17 are patentable under 35 U.S.C. §102(e) over U.S. Patent No. 6,336,138 to Caswell (hereinafter "Caswell")?

Whether claims 18-19 under 35 U.S.C. §102(e) are patentable over U.S. Patent No. 6,205,471 to Gilchrist, et al. (hereinafter "Gilchrist")?

Whether claims 9-10 and 13 under 35 U.S.C. §103(a) are patentable over Caswell in view of U.S. Patent No. 5,958,006 to Eggleston, et al. (hereinafter "Eggleston")?

Whether claims 11, 16, 27-31, 40-41, and 46-51 are patentable under 35 U.S.C. §103(a) over Caswell in view of Gilchrist?

Whether claims 32-34, 42 and 45 under 35 U.S.C. §103(a) are patentable over Caswell in view of Gilchrist and in further view of Eggleston?

Whether claim 20 under 35 U.S.C. §103(a) is patentable over Gilchrist in view of alleged knowledge in the art?

Whether claim 21 is patentable under 35 U.S.C. §103(a) over Gilchrist in view of U.S. Publication No. 2004/0122730 A1 to Tucciarone, et al. (hereinafter "Tucciarone")?

Whether claims 22-25 are patentable under 35 U.S.C. §103(a) over Gilchrist in

Whether claim 26 is patentable under 35 U.S.C. §103(a) over Gilchrist in view of Eggleston?

10/521,507 Page 9 of 53 6783P095

view of U.S. Publication No. 2002/0049815 to Dattatri?

VII. ARGUMENT

Claims 1-8, 12, 14-15, and 17-19 stand rejected under 35 U.S.C. § 102(e) as being unpatentable. Claims 9-11, 13, 16, 20-34, 40-42, 45-51 stand rejected under 35 U.S.C. § 103(a). As discussed above, Appellants' invention as claimed is directed to methods and systems to assist organizations in developing, testing, deploying, and analyzing messaging systems in an integrated and scalable fashion (Specification, abstract, paragraph 0036-0052).

A. Overview of Cited References

1. U.S. Patent No. 6,336,138 to Caswell

Caswell describes a method and system for modeling a particular set of elements, services and inter-dependencies in a specific computing environment that is available via a network (Caswell, Abstract; column 5, lines 45-62). A service model template is the basis for generating a service model instance of the selected service (Caswell, column 5, line 45 to column 6, line 35). When the template is combined with discovery information that is specific to actual network elements and the actual network services of a particular computing environment, the service model instance is generated (Caswell, column 7, lines 36-59). The generated service model instance further includes health and status indicators for the service and network elements that make up the service (Caswell, column 8, lines 43-59). For example, an email messaging system that includes a user computer, internet service provider servers, etc. is topographically

10/521,507 Page 10 of 53 6783P095

modeled to indicate the current performance of the network that provides the email messaging services (Caswell, column 18, line 55 to column 19, line 58; Figure 5).

2. U.S. Patent No. 6,205,471 to Gilchrist, et al. ("Gilchrist")

Gilchrist describes Gilchrist discloses an object-oriented (OO) framework for use with object oriented programming (OOP) systems. The OO framework of Gilchrist provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function. (Gilchrist, Abstract). Gilchrist teaches tailoring a framework by the framework users to meet their requirements for the framework and to provide a mail server system (Gilchrist, column 2, lines 51 -63). The design of the framework comprises the design of the core function of the framework (i.e., that part of the framework that is not subject to potential customization by the framework consumer) and the extensible function of the framework (i.e., that part of the framework that is subject to potential customization by the framework consumer) (Gilchrist, column 6, lines 31 -43),

3. U.S. Patent No. 5,958,006 to Eggleston, et al. ("Eggleston")

Eggleston discloses using indices to provide flexibility in reviewing and requesting otherwise filtered data based on user definable filter settings. (Eggleston, Abstract and Column 8, lines 48-55). Because the Eggleston system maintains indices identifying information about data which has not been fully transmitted to a receiving unit, a user may request to receive partial or full transfers of the filtered data.

10/521,507 Page 11 of 53 6783P095

(Eggleston, Abstract). Thus, Eggleston discloses a cost efficient mechanism of reviewing data that failed user selected filter parameters. (Eggleston, Abstract).

4. U.S. Publication No. 2004/0122730 to Tucciarone, et al. ("Tucciarone")

Tucciarone discloses a system and method for a user to request information in desired categories, customize each request with respect o the amount of information wanted, the active duration of such request, the device or IP address(es) to which to deliver such information and other user-specified preferences (Tucciarone, Abstract). Thus, the Tucciarone method and system disclose an on-request service precluding unwanted solicitation of electronic messages (Tucciarone, Abstract).

5. U.S. Publication No. 2002/049815 to Dattatri ("Dattatri")

Dattatri discloses a system for monitoring and management of transfer of electronic messages such as to enable businesses to reliably and securely participate in electronic document interchanges (EDI) by adapting business application programs (B2B) for use over the Internet (Dattatri, Abstract; page 2, paragraph 0009; page 3, paragraph 0036). The Dattatri system provides for a secure transfer of messages, tracking, monitoring, archiving, automated responses, and statistics gathering (Dattatri, page 1, paragraph 0008; page 2, paragraphs 0009-0011 and 0017). Customer-selected security levels can be specified for different types of traffic (Dattatri, page 2, paragraph 0009). Also, continuous and updated status of the system's network and customer messages is provided (Dattatri, page 2, paragraph 0009).

10/521,507 Page 12 of 53 6783P095

B. Rejection I: Claims 1-8, 12, 14-15, and 17. Appellants' Invention is Patentable Over U.S. Patent No. 6,336,138 to Caswell.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim" (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)) and "the elements must be arranged as required by the claim" (*In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The Appellants respectfully submit that Caswell fails to disclose each and every element of the invention as claimed.

As discussed above, claim 1 is directed to a system that assists organizations in developing, testing, deploying, and analyzing messaging systems in an integrated and scalable fashion (Specification, abstract, paragraph 0036-0052). In particular, claim 1 recites:

A system for organizations to develop, test, execute and analyze messaging programs defining a message application server comprising:

- (a) a dialog designer configured to provide a user interface to an organization's program designer and marketer, to allow for rapid messaging program creation, to provide the ability to select a type of messaging program, to select a service address for the messaging program, to schedule the messaging program for execution, to upload messaging user data into lists, to create segments, to download messaging program result data, to test the messaging program, to provide reports, including real-time reports, on the messaging program;
- (b) a dialog server configured to execute the messaging program by execution of a messaging instructions, to manage substantially simultaneously executed messaging programs, to store messaging user

results and message delivery status, to maintain state and session context across message invocations for messaging users within a messaging program; and

(c) a message exchange configured to route messages to and from messaging service providers, to manage service addresses, to perform message billing and to connect to messaging service providers;

whereby organizations can execute messaging programs interacting with messaging users via the messaging service providers.

(Emphasis Added)

Appellants respectfully submit that Caswell fails to disclose "a dialog designer configured to provide a user interface ... to allow for rapid messaging program creation, to provide the ability to select a type of messaging program ... to schedule the messaging program for execution ... to test the messaging program, to provide reports ... on the messaging program," as claimed.

Caswell, as discussed above, describes a method and system for modeling a particular set of elements, services, and inter-dependencies in a specific computing environment that is available via a network (Caswell, Abstract; column 5, lines 45-62). That is, Caswell creates a topographical mapping of an existing network (Caswell, column 8, lines 43-59). Caswell therefore teaches <u>using a network topology/map of network elements and services to determine the health of a network</u>. However, the concept of <u>developing</u>, testing, and executing messaging programs, as well as analyzing the developed messaging programs results, is completely absent from Caswell.

Simply creating and displaying a topographical map of an existing network, as disclosed in Caswell, fails to teach "a dialog designer configured to provide a user interface ... to allow for rapid messaging program creation, to provide the ability to select a type of messaging program ... to schedule the messaging program for execution ... to

10/521,507 Page 14 of 53 6783P095

test the messaging program, to provide reports ... on the messaging program," as claimed. Thus Caswell must fail to teach "each and every element as set forth in the claim," as required under 35 U.S.C. § 102.

The Examiner stated "Caswell discloses 'a dialog designer' as a discovery template and generating the service model, these provide the features that the dialog designer provides (col. 3 In. 35-58, Fig. 9-12)" (Final Office Action, mailed 12/26/2007, page 8). The Examiner further states:

Caswell does disclose "a dialog designer configured . . . to allow for rapid messaging program creation" as generating a service (col. 5 ln. 40-42), "to schedule the messaging programs for execution" as a configuration where agents are scheduled for execution (col. 15 ln. 60), and "to test the messaging programs, to provide reports ... on the messaging programs" as an operational monitoring function (col. 4 ln. 1).

(Final Office Action, mailed 12/28/07, page 3)

Appellants respectfully disagree that Caswell discloses the claimed dialog designer.

Rather, in the passages cited by, and relied upon, by the Examiner, Caswell recites:

A method and system for modeling a selected service that is available via a network includes utilizing a service model template as a basis for generating a service model instance of the selected service. The service model template anticipates -network elements and network services that cooperate in execution of the selected service. The service model template is specific to the service, but is independent of any particular computing environment. When the template is combined with discovery information that is specific to the actual network elements and the actual network services of a particular computing environment, the service model instance is generated. That is, the service model instance is the realization of the template for a particular set of elements, services and interdependencies in a specific computing environment.

The discovered instance information that is specific to the actual network elements and actual network services may be acquired using any of a variety of techniques. However, in the preferred embodiment, the discovered instance information is determined using auto-discovery

10/521,507 Page 15 of 53 6783P095

techniques without requiring human involvement. Moreover, the step of generating the service model instance is preferably executed in computing programming and includes accessing at least one memory store in which the service model template and the discovered instance information are stored.

(Caswell, column 3, lines 35-58) (Emphasis Added)

Thus, Caswell provides a service model (i.e., a topographical map) of a network (Caswell, column 4, lines 40-42) that is based on an existing template (Caswell, column 3, lines 35-58). The health of the elements in the map are measured (Caswell, column 15, line 60) so that the health of the network can be monitored (Caswell, column 4, line 1). Thus, in the passages Caswell merely describes creating and monitoring a map of existing network elements. Appellants respectfully submit that nothing in Caswell, however, describes "a dialog designer configured to provide a user interface ... to allow for rapid messaging program creation, to provide the ability to select a type of messaging program ... to schedule the messaging program for execution ... to test the messaging program, to provide reports ... on the messaging program."

Therefore, because "each and every element as set forth in the claim" is not taught by Caswell, Caswell fails to anticipate claim1. Claims 2-8, 12, 14-15, and 17 depend, directly or indirectly, from claim 1, and therefore incorporates all of its limitations. Since Caswell fails to anticipate claim 1 as discussed above, Caswell must also fail to anticipate claims 2-8, 12, 14-15, and 17.

Appellants respectfully request the rejection of claim 1-8, 12, 14-15, and 17 under 35 U.S.C. § 102(e) be withdrawn.

10/521,507 Page 16 of 53 6783P095

C. Rejection II: Claims 18 and 19. Appellants' Invention is Patentable Over U.S. Patent No. 6,205,471 to Gilchrist.

As discussed above, in order for Gilchrist to anticipate claims 18 and 19, "each and every element in the claim" must be found in Gilchrist "in as complete detail as is contained in the ... claim." (*See Verdegaal*, 814 F.2d 628, 63; *Richardson*, 868 F.2d 1236). Appellants respectfully submit that Gilchrist fails to disclose each and every element of the invention as claimed.

Claim 18 is directed to a method that assists organizations in developing, testing, deploying, and analyzing messaging systems in an integrated and scalable fashion (Specification, abstract, paragraph 0036-0052). Claim 18 recites:

A method for organizations to develop, execute and analyze messaging programs comprising:

- (a) an organization's program designer designing the messaging program;
 - (b) the program designer selecting a segment for push programs;
 - (c) the program designer selecting a program service address;
 - (d) the program designer testing the messaging program;
- (e) executing the messaging program where the messaging program is either started manually or automatically at a scheduled date;
 - (f) messaging users interacting with the messaging program;
- (g) capturing and storing the messaging users responses and other messaging user data in a data database;
- (h) stopping the messaging program either manually or automatically at a scheduled date; and
- (i) analyzing the messaging program using the data captured and stored during the program execution;

whereby organizations can execute messaging programs interacting with messaging users via messaging service providers.

(Emphasis Added)

Appellants respectfully submit that Gilchrist fails to disclose "(a) an organization's program designer designing the messaging program; (b) the program designer selecting a segment for push programs; (c) the program

designer selecting a program service address; (d) the program designer testing the messaging program; [and] (e) executing the messaging program where the messaging program is either started manually or automatically at a scheduled date."

Gilchrist discloses an object-oriented (OO) framework for use with object oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function (Gilchrist, Abstract; column 2, lines 51 -63). A framework is a structure and mechanism, i.e., it contains objects and methods, to allow one to design a program. When designing a framework, one designs an environment to enable himself or others to design programs in this environment. In contrast, when one designs a program it is designed to enable an entity to perform an action, usually automatically. Thus, programs are not abstract in their performing some action(s), while a framework is abstract in its creating an environment for other programs to be developed.

Thus, Gilchrist discloses a mechanism for conversion of e-mail messages between different protocols (Gilchrist, column 2, lines 30-32) by describing an electronic mail inter-protocol gateway mechanism that receives e-mail messages from a sending location in one protocol and transfers such messages to a destination location in another protocol (Gilchrist, column 2, lines 41 -48). However, Gilchrist does not teach or suggest an organization's program designer designing a messaging program. The design of a framework that supports e-mail

10/521,507 Page 18 of 53 6783P095

communication regardless of the e-mail protocol is not the same as the design of a messaging program by an organization's program designer designing and executing a messaging program to support communication with messaging users interacting with the messaging program.

The Examiner asserts, even though Gilchrist describes providing a framework:

Gilchrist discloses that a framework is a solution to a programming problem (col. 6 ln. 14-15), similar to the way a program is a solution to a programming problem. Although Gilchrist uses the term framework, in light of the definition provided by Gilchrist one of ordinary skill in the art can interpret the term framework as a type of program.

(Final Office Action, mailed 12/26/2007, pages 3-4)

Appellants respectfully disagree. Rather, Gilchrist explicitly makes certain that there is no confusion as to what a "framework" is, by stating:

There has been an evolution of terms and phrases which have particular meaning to those skilled in the art of OO design. However, the reader should note that one of the loosest definitions in the OO art is the definition of the word "framework." The word framework means different things to different people. Therefore, when comparing the characteristics of two supposed OO frameworks, the reader should take care to ensure that the comparison is indeed one of "apples to apples." As will become more clear in the forthcoming paragraphs, the term framework is used in this specification to describe an OO technology system that has been designed to have core function and extensible function. The core function is that part of the framework that is not subject to modification by the framework purchaser. The extensible function, on the other hand, is that part of the framework that has been explicitly designed to be customized and extended by the framework purchaser as part of its implementation.

• • •

While in general terms an OO framework can be properly characterized as a type of OO solution to a programming problem, there is nevertheless a fundamental difference between a framework and a basic OO programming solution. The difference is that frameworks are designed in a way that permits and promotes customization and extension of certain

10/521,507 Page 19 of 53 6783P095

aspects of the OO solution, whereas a basic OO solution can be said to comprise a particular collection, or library, of classes and objects. In other words, frameworks provide an OO programming solution that can be customized and extended to address individualized requirements that change over time.

(Gilchrist, column 5, line 62 to column 6, line 25) (Emphasis Added)

Thus, Gilchrist ensures that one skilled in the art will understand that according to the teachings of Gilchrist, a program and a "framework" are not the same. As a result, Gilchrist by its very terms ensures that the design of a framework that supports e-mail communication is different from an organization's program designer designing and executing a messaging program to support communication with messaging users interacting with the messaging program, as claimed.

Therefore, Gilchrist cannot anticipate "(a) an organization's program designer designing the messaging program; (b) the program designer selecting a segment for push programs; (c) the program designer selecting a program service address; (d) the program designer testing the messaging program; [and] (e) executing the messaging program where the messaging program is either started manually or automatically at a scheduled date," because Gilchrist fails to teach "each and every element," as claimed.

Thus, Gilchrist does not disclose each and every limitation of claim 18 and, therefore, Gilchrist does not anticipate claim 18, and claim 19 which depends therefrom. Appellants respectfully request the rejection of claim 18 and 19 under 35 U.S.C. § 102(e) be withdrawn.

10/521,507 Page 20 of 53 6783P095

D. Rejection III: Claims 9-10 and 13 Appellants' Invention is Patentable Over Caswell in view of Eggleston.

Appellants respectfully submit that Caswell in view of Eggleston fail to teach or suggest each and every limitation as claimed.

Claims 9-10 and 13 depend on claim 1, and therefore incorporate all of its limitations. As discussed above, Caswell fails to teach "a dialog designer configured to provide a user interface ... to allow for rapid messaging program creation, to provide the ability to select a type of messaging program ... to schedule the messaging program for execution ... to test the messaging program, to provide reports ... on the messaging program," as recited in claim 1.

Eggleston discloses using indices to provide flexibility in reviewing and requesting otherwise filtered data based on user definable filter settings (Eggleston, Abstract; column 8, lines 48-55). Because the Eggleston system maintains indices identifying information about data which has not been fully transmitted to a receiving unit, a user may request to receive partial or full transfers of the filtered data (Eggleston, Abstract). Thus, Eggleston discloses a cost efficient mechanism of reviewing data that failed user selected filter parameters. (Eggleston, Abstract). However, like Caswell, Eggleston is silent about and does not teach or suggest "a dialog designer configured ... to allow for rapid messaging program creation, ... to schedule the messaging programs for execution, ... to test the messaging programs, to provide reports ... on the messaging programs," as recited in part in claim 1.

Thus, Eggleston also fails to teach the limitations as claimed in claim 1.

Consequently, the combination of Caswell and Eggleston, whether taken alone or in combination, fails to render claim 1, and thus dependent claims 9-10 and 13, obvious.

10/521,507 Page 21 of 53 6783P095

E. Rejection IV: Claims 11, 16, 27-31, 40-41, and 46-51. Appellants' Invention is Patentable Over Caswell in view of Gilchrist.

The Appellants respectfully submit that Caswell and Gilchrist, whether taken alone or in combination, fail to disclose or suggest the invention as claimed by the Appellants.

1. Claim Group 1: Claims 11 and 16

Claims 11 and 16 depend on claim 1, and therefore incorporate all of its limitations. As discussed above, Caswell does not disclose "a dialog designer configured ... to allow for rapid messaging program creation, ... to schedule the messaging programs for execution, ... to test the messaging programs, to provide reports ... on the messaging programs," as recited in claim 1. Appellants respectfully submit that Gilchrist does not supply the missing limitations.

As further discussed above, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function (Gilchrist, Abstract). Gilchrist does not teach or suggest "a dialog designer configured ... to allow for rapid messaging program creation, ... to schedule the messaging programs for execution, ... to test the messaging programs, to provide reports ... on the messaging programs," as recited in claim 1. As such, the combination of Caswell and Gilchrist does not teach or suggest each and every limitation of claim 1, and therefore cannot render obvious associated dependent claims 11 and 16.

10/521,507 Page 22 of 53 6783P095

Therefore, Appellants respectfully request the withdrawal of the rejection of claims 11 and 16 under 35 U.S.C. § 103 over the combination of Caswell and Gilchrist.

2. Claim Group 2: Claim 27

As discussed above, Caswell discloses a method and system of modeling a selected service within a network environment by forming a service model template that is not specific to the network and combining it with discovered information that is specific to actual network elements and network services to monitor and report on service-level metrics (Caswell, Abstract; column 3, lines 5-15 and lines 28-31). The combination of the template with discovered network information results in generating a service model instance which shows dependencies between the elements and services of the network, identifies the "health" of different elements and services, and diagnoses problems associated with the service (Caswell, Abstract; column 1, lines 6-11).

Furthermore, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function. (Gilchrist, Abstract). Gilchrist discloses a mechanism for conversion of e-mail messages between different protocols (Gilchrist, column 2, lines 30-32) by describing an electronic mail inter-protocol gateway mechanism that receives e-mail messages from a sending location in one protocol and transfers such messages to a destination location in another protocol (Gilchrist, column 2, lines 41 -48).

Claim 27 recites:

A method for organizations to deploy pull messaging programs comprising:

- (a) receiving in a message exchange a messaging device originated message from a messaging user messaging device via a messaging service provider system, the messaging device originated message is of any one of a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV:
- (b) forwarding the messaging device originated message from the message exchange to a dialog server;
- (c) looking up the appropriate session context and pull messaging program based on the messaging device address and the program service address;
- (d) executing pull messaging program instructions in the dialog server upon receiving the messaging device originated message and based on the session state and context;
- (e) routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange;

whereby the messaging users who sent a messaging device originated message receives a reply message on his messaging device.

(Emphasis Added)

Appellants respectfully submit that Caswell and Gilchrist, whether taken alone or in combination, fail to describe or suggest "looking ... executing ... and routing," as claimed.

The Examiner has stated that Caswell does not teach "looking up the appropriate session context and pull messaging program based on the messaging device address and the program service address," "executing pull messaging program instructions in the dialog server upon receiving the messaging device originated message and based on the session state and context," and "routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and

storing any message status delivery returned by the message exchange" (Final Office Action, mailed 12/26/07, page 14).

The Examiner therefore relies on Gilchrist and states that Gilchrist discloses looking up the appropriate session context and messaging program based on the messaging device address and the program service address in the Abstract, at column 2, lines 11 -29, and in Figs. 21-23 (Final Office Action, mailed 12/26/07, page 14). The Examiner further states that Gilchrist discloses "executing pull messaging program instructions [...] based on the session state" at column 3, lines 21-35 and at col. 17, lines 25-30, and "routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange" in Fig. 14 and Fig. 38 (Final Office Action, mailed 12/26/08, page 14). Appellants respectfully disagree.

Claim 27 recites in part "the messaging device originated message is of any one of a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV." In contrast to claim 27, Gilchrist teaches a framework that supports conversion of e-mail messages between different protocols. However, Gilchrist does not disclose supporting any of the other messaging technologies taught in claim 27.

Furthermore, the Examiner states "routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange" is shown in

10/521,507 Page 25 of 53 6783P095

Fig. 14 and Fig. 38 (Final Office Action, mailed 12/26/08, page 14). However, Figure 14 of Gilchrist describes a message class for processing an email message, but merely lists the names of method in the class (Gilchrist, column 19, line 10-23; Figure 14). Furthermore, Figure 38 merely addresses the situation where an email message delivery fails (Gilchrist, column 39, line 4 to column 40 line 5; Figure 38). None of the methods in the class, nor the non-delivery scenario, disclosed by Gilchrist, however, have any hint or suggestion of "routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange." There is simply no discussion in Gilchrist of routing messages to an appropriate service provider for messages that are bound for a plurality of different service providers, as claimed in claim 27.

As such, the combination of Caswell and Gilchrist does not teach or suggest each and every limitation of claim 27. Therefore, claim 27 is not obvious over the combination of references. Appellants respectfully request the withdrawal of the rejection of claim 27 under 35 U.S.C. § 103 over the combination of Caswell and Gilchrist.

3. Claim Group 3: Claim 28-31, 40-41, and 46-51 Claim 28 recites:

A system for developing, analyzing, deploying, and monitoring targeted messaging applications, comprising:

a client system, the client system comprising one or more messaging devices;

a message service provider system;

a message application server in communication with the client system and the message service provider system;

10/521,507 Page 26 of 53 6783P095

wherein the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging applications, the messaging applications to generate messages, receive messages from and send messages to the message service provider system, and

wherein the message application server is configured to determine and route the messages to the message service provider system regardless of the message service provider system's implemented messaging technology.

Appellants respectfully submit that Caswell and Gilchrist, alone or in combination, fail to describe or suggest "the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging application, the messaging applications to generate messages, receive messages from and send messages to the message service provider system."

The Examiner has stated that Caswell does not teach "client systems developing messaging applications" (Final Office Action, mailed 12/26/07, page 15). The Examiner has stated that Gilchrist discloses this limitation at Column 2, lines 11-29 and Column 6, lines 14-53 (Final Office Action, mailed 12/26/07, page 15). Appellants respectfully disagree.

As discussed above, Gilchrist discloses a mechanism for conversion of e-mail messages between different protocols (Column 2, lines 30-32) by describing an electronic mail inter-protocol gateway mechanism that receives e-mail messages from a sending location in one protocol and transfers such messages to a destination location in another protocol (Gilchrist, column 2, lines 41 -48).

However, Gilchrist does not disclose that "the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging applications, the messaging applications

10/521,507 Page 27 of 53 6783P095

to generate messages, receive messages from and send messages to the message service provider system," as recited in part in claim 28. Disclosing an email gateway that can accept multiple protocols does not disclose <u>client systems developing</u> <u>messaging applications</u>. The Gilchrist mechanism of converting from one email protocol to another is not the same as a client system developing, analyzing, testing, deploying, and monitoring messaging applications, as in claim 28. As discussed above, Gilchrist makes clear that the "framework" discussed in Gilchrist is not the same as a client system developing, testing and deploying a monitoring messaging applications (Gilchrist, column 5, line 62 to column 6, line 25). Therefore, Gilchrist fails to teach or suggest the same novel features of claim 28 that are missing in Caswell.

As such, the combination of Caswell and Gilchrist does not teach or suggest each and every limitation of claim 28, as amended, and therefore cannot render obvious associated dependent claims 29-31, 34-41, and 44. Appellants respectfully request the withdrawal of the rejection of claims 29-31, 34-41, and 44 under 35 U.S.C. § 103 over the combination of Caswell and Gilchrist.

F. Rejection V: Claims 32-34, 42, and 45. Appellants' Invention is Patentable Over Caswell in view of Gilchrist and further in view of Eggleston.

Claims 32-34, 42, and 45 depend on claim 28, and therefore incorporate all of its limitations. As discussed above, the combination of Caswell and Gilchrist does not teach or suggest "the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging application, the messaging applications to generate messages, receive messages from and send messages to the message service provider system,"

10/521,507 Page 28 of 53 6783P095

as recited in claim 28, from which claims 32-34 and 42-43 depend. Appellants respectfully submit that Eggleston does not supply the missing limitations.

Eggleston discloses using indices to provide flexibility in reviewing and requesting otherwise filtered data based on user definable filter settings (Eggleston, Abstract; column 8, lines 48-55). Because the Eggleston system maintains indices identifying information about data which has not been fully transmitted to a receiving unit, a user may request to receive partial or full transfers of the filtered data (Eggleston, Abstract). Thus, Eggleston discloses a cost efficient mechanism of reviewing data that failed user selected filter parameters (Eggleston, Abstract). However, Eggleston is silent about and does not teach or suggest that "the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging application, the messaging applications to generate messages, receive messages from and send messages to the message service provider system," as recited in claim 28.

As such, the combination of Caswell, Gilchrist, and Eggleston does not teach or suggest each and every limitation of claim 28, and therefore cannot render obvious associated dependent claims 32-34 and 42-43. Therefore, Appellants respectfully request the withdrawal of the rejection of claims 32-34 and 42-43 under 35 U.S.C. § 103 over the combination of Caswell, Gilchrist, and Eggleston.

10/521,507 Page 29 of 53 6783P095

G. Rejection VI: Claim 20. Appellants' Invention is Patentable Over Gilchrist in view of Alleged Knowledge in the Art.

As discussed, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function (Gilchrist, Abstract). Gilchrist discloses a mechanism for conversion of e-mail messages between different protocols (Column 2, lines 30-32) by describing an electronic mail inter-protocol gateway mechanism that receives e-mail messages from a sending location in one protocol and transfers such messages to a destination location in another protocol (Gilchrist, column 2, lines 41 -48).

However, Gilchrist is silent about and does not teach or suggest an organization's program designer designing a messaging program, as recited in claim 18. The design of a framework that supports e-mail communication regardless of the e-mail protocol is not the same as the design of a messaging program by an organization's program designer to support communication with messaging users interacting with the messaging program. Alleged knowledge in the art does not supply this limitation. Thus, Gilchrist and alleged knowledge in the art do not disclose each and every limitation of claim 18 and, therefore, the associated dependent claim 20 is not obvious. Appellants respectfully request withdrawal of the rejection of claim 20 under 35 U.S.C. § 103.

H. Rejection VII: Claim 21. Appellants' Invention is Patentable Over Gilchrist in view of Tucciarone.

As discussed above, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function. (Gilchrist, Abstract). Gilchrist is silent about, and does not teach or suggest, an organization's program designer designing a messaging program, as recited in claim 18, from which claim 21 depends. Appellants respectfully submit that Tucciarone does not supply the missing limitation.

Tucciarone discloses a system and method for a user to request information in desired categories, customize each request with respect o the amount of information wanted, the active duration of such request, the device or IP address(es) to which to deliver such information and other user-specified preferences (Tucciarone, Abstract). Thus, the Tucciarone method and system disclose an on-request service precluding unwanted solicitation of electronic messages. (Tucciarone, Abstract). However, Tucciarone does not disclose an organization's program designer designing a messaging program, as recited in claim 18.

As such, the combination of Gilchrist and Tucciarone does not teach or suggest each and every limitation of claim 18, and therefore cannot render obvious associated dependent claim 21. Appellants respectfully request the withdrawal of the rejection of claim 21 under 35 U.S.C. § 103 over the combination of Gilchrist and Tucciarone.

10/521,507 Page 31 of 53 6783P095

I. Rejection VIII: Claims 22-25. Appellants' Invention is Patentable Over Gilchrist in view of Dattatri.

Claims 22-25 depend on claim 18, and incorporate its limitations. As discussed above with respect to claim 18, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function (Gilchrist, Abstract). Gilchrist is silent about, and does not teach or suggest, an organization's program designer designing a messaging program, as recited in claim 18. Appellants respectfully submit that Dattatri does not supply the missing limitation.

Dattatri discloses a system for monitoring and management of transfer of electronic messages such as to enable businesses to reliably and securely participate in electronic document interchanges (EDI) by adapting business application programs (B2B) for use over the Internet (Dattatri, Abstract; page 2, paragraph 0009; page 3, paragraph 0036). The Dattatri system provides for a secure transfer of messages, tracking, monitoring, archiving, automated responses, and statistics gathering (Dattatri, page 1, paragraph 0008; page 2, paragraphs 0009-0011 and 0017). Customer-selected security levels can be specified for different types of traffic (Dattatri, page 2, paragraph 0009). Also, continuous and updated status of the system's network and customer messages is provided (Dattatri, page 2, paragraph 0009).

However, like Gilchrist, Dattatri does not teach or suggest an organization's program designer designing a messaging program, as recited in claim 18. As such, the combination of Gilchrist and Dattatri does not teach or suggest each and every limitation of claim 18, and therefore cannot render obvious associated dependent claims 22-25.

10/521,507 Page 32 of 53 6783P095

Therefore, Appellants respectfully request the withdrawal of the rejection of claims 22-25 under 35 U.S.C. § 103 over the combination of Gilchrist and Dattatri.

J. Rejection IX: Claim 26. Appellants' Invention is Patentable Over Gilchrist in view of Eggleston.

As discussed above, "[t]o establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) must teach or suggest all the claim limitations" (MPEP 706.02(j); *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The Appellants respectfully submit that Gilchrist and Eggleston, whether taken alone or in combination, fail to disclose or suggest the invention as claimed.

As discussed, Gilchrist discloses an object-oriented (OO) framework for use with object-oriented programming (OOP) systems which provides a common message processing system structure that can be placed on any OOP platform and be configured to support any e-mail message protocol standard or specific mail function (Gilchrist, Abstract). Furthermore, Eggleston discloses using indices to provide flexibility in reviewing and requesting otherwise filtered data based on user definable filter settings. (Eggleston, Abstract; column 8, lines 48-55).

Claim 26 recites:

A method for organizations to push messages to messaging users comprising:

- (a) creating a segment;
- (b) starting a messaging program;
- (c) executing a bulksend in a dialog server which retrieves the messaging users messaging device addresses and data defined in the segment, and <u>filtering out the messaging device addresses of users that have opted-out</u>, the <u>filtering out to result in the users that have opted out not receiving the push messages</u>;

- (d) executing a messaging program instruction in the dialog server for each messaging device address originating from the bulksend;
- (e) routing the push message to a message exchange to be sent to the appropriate messaging service provider system, and storing any message status delivery returned to the message exchange;

whereby the messaging users whose messaging device addresses are in the segment receive a push message.

(Emphasis Added)

Appellants respectfully submit that Gilchrist and Eggleston, whether taken alone or in combination, fail to teach or suggest "filtering out the messaging device addresses of users that have opted-out, the filtering out to result in the users that have opted out not receiving the push messages," as claimed.

The Examiner has stated that Gilchrist does not teach filtering out the messaging device addresses of users that have opted out (Final Office Action, mailed 12/26/07, page 24). The Examiner also has stated that Eggleston teaches "an opt-out system" (Final Office Action, mailed 12/26/07, page 24). Appellants respectfully disagree.

Eggleston discloses using indices to provide flexibility in reviewing and requesting otherwise filtered data based on user definable filter settings (Eggleston, Abstract; column 8, lines 48-55). Because the Eggleston system maintains indices identifying information about data which has not been fully transmitted to a receiving unit, a user may request to receive partial or full transfers of the filtered data (Eggleston, Abstract). Thus, Eggleston discloses a cost efficient mechanism of reviewing data that failed user selected filter parameters (Eggleston, Abstract).

In contrast to claim 26, Eggleston discloses that clients are provided with a means to effect filtering of their communications based on user-defined settings, rather than having to choose between receiving no messages or receiving all messages.

10/521,507 Page 34 of 53 6783P095

(Column 8, lines 48-55). Thus, Eggleston does not teach or suggest "filtering out the

messaging device addresses of users that have opted-out, the filtering out to result in

the users that have opted out not receiving the push messages."

The Examiner maintains that Gilchrist teaches the noted limitations citing column

9, lines 27-31 and column 8, lines 40-55 (Final Office Action, mailed 12/26/07, page 7).

In those passages, Gilchrist describe a data indexing list, where the list defines how to

data is filtered. That is Gilchrist at best filters data based on the data itself, but fails to

teach or even suggest "filtering out the messaging device addresses of users that have

opted-out, the filtering out to result in the users that have opted out not receiving the

push messages."

As such, the combination of Gilchrist and Eggleston does not teach or suggest

each and every limitation of claim 26, and therefore cannot render claim 26 obvious.

Appellants respectfully request the withdrawal of the rejection of claims 26 under 35

U.S.C. § 103 over the combination of Gilchrist and Eggleston.

VIII. CONCLUSION

Based on the foregoing, Appellants respectfully submit that that the Board should

overturn the rejection of all pending claims and hold that all of the claims currently under

review are allowable.

Respectfully submitted,

Dated: May 27, 2008

/Judith Szepesi/

Judith A. Szepesi

Reg. No. 39.393

IX. CLAIMS APPENDIX

The claims involved in this appeal are presented below.

- (Previously Presented) A system for organizations to develop, test,
 execute and analyze messaging programs defining a message application server comprising:
- (a) a dialog designer configured to provide a user interface to an organization's program designer and marketer, to allow for rapid messaging program creation, to provide the ability to select a type of messaging program, to select a service address for the messaging program, to schedule the messaging program for execution, to upload messaging user data into lists, to create segments, to download messaging program result data, to test the messaging program, to provide reports, including real-time reports, on the messaging program;
- (b) a dialog server configured to execute the messaging program by execution of a messaging instructions, to manage substantially simultaneously executed messaging programs, to store messaging user results and message delivery status, to maintain state and session context across message invocations for messaging users within a messaging program; and
- (c) a message exchange configured to route messages to and from messaging service providers, to manage service addresses, to perform message billing and to connect-to messaging service providers;

whereby organizations can execute messaging programs interacting with messaging users via the messaging service providers.

10/521,507 Page 36 of 53 6783P095

- 2. (Previously Presented) The system of claim 1, wherein a plurality of organizations hierarchically organized can independently develop, test, execute, and analyze messaging programs.
- 3. (Previously Presented) The system of claim 1, wherein the organizations are not messaging service providers.
- 4. (Previously Presented) The system of claim 1, wherein the message application server is connected to a plurality of messaging service providers systems.
- 5. (Previously Presented) The system of claim 1, wherein the message application server is connected to the messaging service providers systems via a data network including, but not limited to, the Internet and private internet, using a variety of messaging protocols, including but not limited to, Simple Mail transfer Protocol (SMTP), Short Message Peer-to-Peer Protocol (SMPP), and instant messaging.
- 6. (Previously Presented) The system of claim 1, wherein the message application server is connected to the organizations via a data network, including, but not limited to, the Internet and private intranets.
- 7. (Previously Presented) The-system of claim 1, wherein the messaging users use messaging devices using a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS),

10/521,507 Page 37 of 53 6783P095

Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV, and client side execution environments.

- 8. (Previously Presented) he system of claim 1, wherein the messaging programs and instructions are designed using a graphical user interface (GUI) design tool and have a text based representation.
- 9. (Previously Presented) The system of claim 1, further comprising a data database to store messaging program data; an opt-out system configured to store lists of users that have opted-out of messaging programs for a particular opt-out scope; a billing system to rate the messaging programs; an address manager to create, configure, provision, and administer messaging program service addresses; and one or more message detail record databases to record all critical service level or billing events.
- 10. (Previously Presented) The system of claim 9, wherein the data stored in the data database is used in future messaging programs.
- 11. (Previously Presented) The system of claim 1, wherein the organization accesses the dialog designer using a web browser from a remote computer via a data network.

10/521,507 Page 38 of 53 6783P095

- 12. (Previously Presented) The system of claim 1, wherein applications executed by the organization can interface with the message application server via web service calls using protocols including, but not limited to, Simple Object Access Protocol (SOAP).
- 13. (Previously Presented) The system of claim 1, wherein the message application server is configured to operate in conjunction with the organizations systems including, but not limited to, customer relationship management (CRM) systems.
- 14. (Previously Presented) The system of claim 1, wherein the dialog server can access the messaging instruction from a remote computer system connected to the dialog server via a data network whereby integration with remote systems can be achieved.
- 15. (Previously Presented) The system of claim 1, wherein the messaging instruction includes, but is not limited to, messaging primitives, unconditional logic primitives, conditional logic primitives, session variable primitives, input/output primitives, remote connectivity primitives, whereby any messaging program of arbitrary complexity can be developed and integrated with remote systems connected to a data network.

- 16. (Previously Presented) The system of claim 1, wherein the dialog server maintains session state and context across message invocations for a pair consisting of a messaging device address and a messaging program address.
- 17. (Previously Presented) The system of claim 1, wherein the dialog server, the message exchange and the connection to the messaging service provider store messages into queues with flow control techniques whereby queue overload is prevented or mitigated.
- 18. (Previously Presented) A method for organizations to develop, execute and analyze messaging programs comprising:
 - (a) an organization's program designer designing the messaging program;
 - (b) the program designer selecting a segment for push programs;
 - (c) the program designer selecting a program service address;
 - (d) the program designer testing the messaging program;
- (e) executing the messaging program where the messaging program is either started manually or automatically at a scheduled date;
 - (f) messaging users interacting with the messaging program;
- (g) capturing and storing the messaging users responses and other messaging user data in a data database;
- (h) stopping the messaging program either manually or automatically at a scheduled date; and

10/521,507 Page 40 of 53 6783P095

(i) analyzing the messaging program using the data captured and stored during the program execution;

whereby organizations can execute messaging programs interacting with messaging users via messaging service providers.

- 19. (Previously Presented) The method of claim 18, wherein the data captured as part of executing a messaging program is used in a subsequent messaging program.
- 20. (Previously Presented) The method of claim 18, wherein the segments are created from list data imported by the program designer into a data database, and from results data generated by the execution of prior messaging programs.
- 21. (Previously Presented) The method of claim 18, wherein the organizations deliver coupons, offers and promotions to the messaging users.
- 22. (Previously Presented) The method of claim 18, further comprising storing important service level and billable events in one or more message detail record ("MDR") databases.
 - 23. (Previously Presented) The method of claim 22, further comprising:
- (a) importing the message detail records generated by the message application server into a billing MDR database;
 - (b) rating and billing the message detail records;

- (c) generating organization invoices and service provider account payable reports;
- 24. (Previously Presented) The method of claim 23, further comprising reconciling service provider invoices for messaging transport costs with service provider account payable reports generated from the message application server message detail records.
 - 25. (Previously Presented) The method of claim 23, further comprising:
- (a) receiving message detail records generated in the messaging service provider system from the messaging service provider;
- (b) importing the message detail records generated in the messaging service provider system into the billing MDR database;
- (c) rating and billing the message detail records generated in the messaging service provider system;
- (d) generating from the message detail records generated in the messaging service provider system service provider accounts payable reports; and
- (e) reconciling the accounts payable reports generated from the message detail records generated in the messaging service provider system with the accounts payable reports generated by the message application server.
- 26. (Previously Presented) A method for organizations to push messages to messaging users comprising:

- (a) creating a segment;
- (b) starting a messaging program;
- (c) executing a bulksend in a dialog server which retrieves the messaging users messaging device addresses and data defined in the segment, and filtering out the messaging device addresses of users that have opted-out, the filtering out to result in the users that have opted out not receiving the push messages;
- (d) executing a messaging program instruction in the dialog server for each messaging device address originating from the bulksend;
- (e) routing the push message to a message exchange to be sent to the appropriate messaging service provider system, and storing any message status delivery returned to the message exchange;

whereby the messaging users whose messaging device addresses are in the segment receive a push message.

- 27. (Previously Presented) A method for organizations to deploy pull messaging programs comprising:
- (a) receiving in a message exchange a messaging device originated message from a messaging user messaging device via a messaging service provider system, the messaging device originated message is of any one of a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV;

- (b) forwarding the messaging device originated message from the message exchange to a dialog server;
- (c) looking up the appropriate session context and pull messaging program based on the messaging device address and the program service address;
- (d) executing pull messaging program instructions in the dialog server upon receiving the messaging device originated message and based on the session state and context;
- (e) routing the messaging device originated message in the message exchange to the appropriate messaging service provider, and storing any message status delivery returned by the message exchange;

whereby the messaging user who sent a messaging device originated message receives a reply message on his messaging device.

- 28. (Previously Presented) A system for developing, analyzing, deploying, and monitoring targeted messaging applications, comprising:
 - a client system, the client system comprising one or more messaging devices; a message service provider system;
- a message application server in communication with the client system and the message service provider system;

wherein the client system is configured to interface with the message application server to enable the client system to develop, analyze, test, deploy, and monitor messaging applications, the messaging applications to generate messages, receive messages from and send messages to the message service provider system, and

wherein the message application server is configured to determine and route the messages to the message service provider system regardless of the message service provider system's implemented messaging technology.

- 29. (Previously Presented) The system of claim 28, wherein the message application server further comprises a dialog server configured to execute messaging applications by executing an application instructions, to manage substantially simultaneously executed message applications, to store messaging user results and message delivery status and to maintain state and session context across message invocations for messaging users within a messaging application.
- 30. (Previously Presented) The system of claim 29, wherein the message application server further comprises a message exchange in communication with the dialog server, the message exchange configured to route messages to and from the messaging service providers.
- 31. (Previously Presented) The system of claim 30, wherein the message application server further comprises a dialog designer in communication with the dialog server and the message exchange, the dialog designer configured to provide an interface to the client system to facilitate rapid message application creation, to provide the ability to select a type of message application, to select the service address for a message application, to schedule the-message applications for execution, to upload

10/521,507 Page 45 of 53 6783P095

messaging user data into lists, to create a segments, to download message application result data, to test the message applications.

32. (Previously Presented) The system of claim 29, wherein the dialog server comprises:

an execution unit to process messaging device originated messages and other events;

a scheduler unit to start and stop the messaging applications or send scheduled events to the execution unit at scheduled times;

an application service system to manage executable applications;

a session system to manage messaging user sessions;

a user system to manage messaging user properties;

an opt-out system to manage the opt-in and opt-out status of messaging device addresses;

an application instruction unit to retrieve and cache required application instructions;

a bulksend unit to send large pushes to messaging device addresses within an application segment;

a dialog server in-queue to store messages or events for execution by the execution unit;

a message delivery status system to record message delivery errors returned by the message exchange;

a monitoring unit to monitor the state of the dialog server;

a dialog server database to store information pertaining to the dialog server;
a dialog server message detail record database to log all accounting or service
level relevant events within the dialog server;

a dialog designer interface to connect the dialog server to the dialog designer; and

a message exchange interface to connect the dialog server to the message exchange.

33. (Previously Presented) The system of claim 32, wherein the message exchange further comprises:

an out queue to store termination messages and dialog server connection messages;

an outgoing message router to route messages based on the application service address and the messaging device address;

a plurality of outgoing handlers, each for a specific messaging technology, to send messages to a particular messaging service provider gateway;

a plurality of incoming handlers, each for a specific messaging technology, to accept messaging device originated messages from a particular messaging service provider gateways;

an incoming message router to route messaging device originated message to the dialog server;

an address manager to create, configure, provision and administer application service addresses;

a billing system configured to display MDR logs, to rate and invoice messaging applications;

a monitoring unit to monitor the state of the message exchange;

a message exchange database to handle the data storage needs of the message exchange;

a message exchange message detail record database to log all billing or service level relevant events within the message exchange system;

a dialog server interface to connect the message exchange to the dialog server;

a dialog designer interface to connect the message exchange to the dialog

a billing MDR database to hold the MDR records for billing purposes.

designer; and

34. (Previously Presented) The system of claim 33, wherein the dialog designer further comprises:

a HyperText Transfer Protocol (HTTP interface to enable the client systems to access the message application server;

a Web Service interface to enable the client systems to automate access to the message application server;

a service layer to implement the core functionality of the dialog designer;

a dialog server interface to connect the dialog designer to the dialog server;

a message exchange interface to connect the dialog designer to the message exchange;

a dialog designer database to store dialog designer transaction information;

a dialog designer data database to store messaging application related information; and

a dialog server message detail record database to store billing and service level operations information.

35-39. (Cancelled)

40. (Previously Presented) The system of claim 28, wherein the message service provider system comprises:

a messaging device, the messaging device having a messaging device address, and

a messaging service provider gateway communicatively connected to the messaging application server to provide for aggregation and delivery of the messages to the messaging device address.

- 41. (Previously Presented) The system of claim 28, wherein the messaging device is selected form a group consisting of data enabled cell phones, wireless enabled Personal Digital Assistants (PDAs), instant messaging devices, mobile e-mail devices and interactive TV devices.
- 42. (Previously Presented) The system of claim 28, wherein the client systems comprises a customer relationship management systems.

43-44. (Cancelled)

- 45. (Previously Presented) The system of claim 30, wherein the message exchange is further configured to manage service addresses and to perform message billing.
- 46. (Previously Presented) The system of claim 31, wherein the dialog designer further comprises a graphical user interface (GUI) design tool component to enable the client systems to develop, analyze, test, and deploy messaging applications.
- 47. (Previously Presented) The system of claim 31, wherein the message applications developed using the dialog designer comprise interactive message applications.
- 48. (Previously Presented) The system of claim 31, wherein the dialog designer further comprises a client interface component to reside on the client system and a server interface component to reside on the message application server, the client interface component being in communication with the server interface component to enable the client system to access the dialog server.
- 49. (Previously Presented) The system of claim 31, wherein the dialog designer is further configured to facilitate reporting on message application transactions.

10/521,507 Page 50 of 53 6783P095

- 50. (Previously Presented) The system of claim 36, wherein the interactive message applications comprise two-way text messaging applications, multimedia messaging applications, instant messaging applications and Macromedia's FLASH based messaging applications.
- 51. (Previously Presented) The system of claim 38, wherein the client interface component is a web browser.

10/521,507 Page 51 of 53 6783P095

X. EVIDENCE APPENDIX

No other evidence is submitted in connection with this appeal.

XI. RELATED PROCEEDINGS APPENDIX

To the best of Appellant's knowledge no related proceedings exist.